CHAPTER VIII. IMPROVING SUPPORT SERVICES FOR PREGNANT WOMEN AND INFANTS

INTRODUCTION

The Infant Mortality Review identified a group of 27 (11%) infant deaths from among the 247 cases reviewed for this report in which support services during pregnancy and infancy were inadequate. Support services are forms of assistance offered to clients to help them address nonmedical concerns which arise during the course of pregnancy and caring for their infants. Examples of support services include public health nursing, nutrition assistance through the Women, Infants and Children Food Supplementation Program (WIC), counseling and health education, substance abuse services, etc. In some cases, the lack of support services was considered to have contributed to the chain of events leading to the death of the infant (i.e. contributing factor) while in other cases, the lack of services was judged to have the potential to result in harm (i.e. associated factor).

Cases in which the Technical Review Committee identified problems with support services were collected and referred to a subcommittee for more detailed review. These problems included a lack of referral to public health nursing for high risk pregnant women; lack of follow-up by public health nurses; lack of follow-up by Child Protective Services (CPS); breakdown in inter-agency and intra-agency communications; client resistance to services offered; inadequate tracking of high-risk clients and/or case management issues; and problems with emergency personnel who first responded to these infant deaths.

This chapter begins with a general description of the 27 cases in the group, followed by a description of the problems identified, illustrative vignettes, and solutions proposed by the Review. The vignettes are composite examples incorporating details of several similar cases and were written to preserve the privacy of the individuals involved. The names that appear are not the actual names of women in the Review.

The Review found that women receiving inadequate support services tended to be at higher risk of poor birth outcomes than the average pregnant King County woman. While these women therefore had a greater need for support services, they also faced greater difficulties in receiving them.

Abbreviations Used In This Chapter	
CPS	Child Protective Services
CWS	Child Welfare System
DSHS	Department of Social and Health Services
PHN	Public Health Nurse
SIDS	Sudden Infant Death Syndrome

This suggests that the occurrence of inadequate support services results from a complex interplay of social, individual and service delivery factors.

DESCRIPTION OF CASES

The infants died from a wide variety of causes, with SIDS being the most common condition (Table 8.1).

TABLE 8.1
CAUSES OF DEATH AMONG CASES WITH INADEQUATE SUPPORT SERVICES

Cause of Death[1]	Number of Cases (%)
SIDS	8 (29.6)
SIDS with additional circumstances	3 (11.1)
Positional Asphyxia	1 (3.7)
Prematurity	7 (25.9)
Disseminated Herpes Infection and Complications due to Prematurity	1 (3.7)
Sepsis	1 (3.7)
Respiratory Failure due to RSV[2] Pneumonia	1 (3.7)
Neonatal Appendicitis	1 (3.7)
Perinatal Asphyxia	1 (3.7)
Apnea, Unknown Etiology	1 (3.7)
Trauma, Motor Vehicle Accident	1 (3.7)
Undetermined	1 (3.7)
Total	**27 (100)**

[1] CAUSE OF DEATH AS DETERMINED BY REVIEW
[2] RSV=RESPIRATORY SYNCYTIAL VIRUS

The 27 cases included in this discussion had a high concentration of risk factors associated with poor birth outcomes. The high prevalence of risk factors in this group lacking adequate support services is concerning because these women may have been among those who would have benefited most from such services. The risk factors found in this group are described below and summarized in Table 8.2 .

- Three-quarters of the mothers were single compared to slightly less than one quarter of all King County mothers giving birth.

- The majority of the mothers were of low socioeconomic status. Even though only seven percent were under age eighteen, more than half had not finished high school. In contrast, only ten percent of all King County mothers had not completed high school. Nearly three-quarters of the cases (compared to one quarter of all King County births) lived in households with incomes low enough to qualify for Medicaid.

- Most of these pregnancies had been unplanned (91 percent as compared to 42 percent among all births in Washington State).

- Three-fifths of the mothers in this group smoked during pregnancy, compared to fifteen percent of all King County births. Although information on alcohol consumption and illicit drug use was often difficult to obtain, the Review found that 52 percent of the mothers used alcohol and other drugs during pregnancy.

- The mothers had high levels of stress, and social disorganization, and low social support.

- Whereas 62 percent of cases had two or more living children at the time of birth of the infant who was the subject of the Review, only 21 percent of all King County births did so. Women who have previously raised several children may still be at risk of not receiving needed support services.

- Many of these women were found to lack adequate support services despite receiving care from PHNs and CPS during their pregnancies. PHNs were involved with 42 percent and CPS with 52 percent of these cases.

TABLE 8.2
RISK FACTORS IN CASES WITH INADEQUATE SUPPORT SERVICES COMPARED TO ALL BIRTHS IN KING COUNTY (1991-1993)

Risk Factor	Cases with Inadequate Support Services[a] (percent) (N=27)	All King County Births (percent) (N=68178)
African or Native American race	11(42.3)	5432(8.4)
Mother less than 18 years	2(7.4)	1177(2.6)
Mother not completing high school	8(61.5)	3672(10.1)
Single marital status	20(74.1)	15173(22.3)
Low income (Medicaid eligible)[b]	13(72.2)	10147(25.3)
Unintended pregnancy	21(91.3)	513(42.3[g])
Inadequate prenatal care	10(66.7)	17621(29.0)
Prematurity	12(46.1)	4733(7.2)
Smoking during pregnancy[b]	14(60.9)	6413(15.0)
Alcohol use during pregnancy[b]	2(10.0)	1567(3.9)
Illicit drug use during pregnancy	13(52.0)	---[c]
High level of psychosocial stressors[d]	22(88.0)	---[c]
Low level of social support[e]	22(84.6)	---[c]
Social disorganization[f]	24(88.9)	---[c]

A. SOURCE OF INFORMATION FOR CASES WAS BIRTH CERTIFICATE DATA, IN ORDER TO FACILITATE COMPARISON WITH ALL KING COUNTY BIRTHS. DATA DERIVED FROM THE MULTIPLE SOURCES OBTAINED FROM THE CASE REVIEW SUGGESTED SOMEWHAT HIGHER PREVALENCES OF RISK FACTORS AMONG CASES THAN THOSE OBTAINED FROM THE BIRTH CERTIFICATES.
B. ALCOHOL USE DURING PREGNANCY AS ASCERTAINED FROM MULTIPLE CASE REVIEW DATA SOURCES WAS SUBSTANTIALLY HIGHER THAN THAT REPORTED ON BIRTH CERTIFICATES: 52 PERCENT OF CASES USED ALCOHOL DURING PREGNANCY BASED ON CASE REVIEW DATA. BIRTH CERTIFICATE DATA ALSO APPEARED TO UNDER-REPORT RATES OF MEDICAID ELIGIBILITY AND MATERNAL SMOKING.
C. DATA ON THESE RISK FACTORS WERE AVAILABLE ONLY FROM CASE REVIEW DATA, NO DATA ARE AVAILABLE ON ALL KING COUNTY BIRTHS.
D. HIGH STRESS WAS DEFINED AS THE PRESENCE OF SEVERAL SIGNIFICANT STRESSORS AS INDICATED BY RESPONSES TO KATHERINE BARNARD'S "DIFFICULT LIFE CIRCUMSTANCE" SCALE. SOME AREAS OF INQUIRY WERE HOMELESSNESS, PARTNER CONFLICT, PHYSICAL/EMOTIONAL ABUSE, FINANCIAL DIFFICULTIES, SUBSTANCE ABUSE, ETC. THE NUMBER AND IMPACT OF MAJOR LIFE CHANGES WAS ALSO CONSIDERED, INCLUDING RECENT LOSS THROUGH THE DEATH OF A FRIEND OR RELATIVE.
E. THE ASSESSMENT OF LOW SOCIAL SUPPORT WAS BASED ON A GLOBAL ASSESSMENT BY THE CASE INTERVIEWER. INTERVIEWERS ASKED MOTHERS TO NAME PEOPLE WHO THEY SPENT THE MOST TIME WITH OR WHO WERE THE CLOSEST TO THEM JUST BEFORE AND DURING THE PREGNANCY. THE NATURE OF THE RELATIONSHIP (E.G. HUSBAND, CO-WORKER) AS WELL AS THE EXTENT OF CONTACT (E.G. AT LEAST ONCE A DAY) WERE OBTAINED. NAMES OF NON-SUPPORTIVE PEOPLE (IF ANY) WERE ALSO SOLICITED. ADDITIONALLY, FOUR SCENARIOS RELATED TO SUPPORT WERE RANKED BY THE MOTHERS. NOTES FROM SOCIAL WORKERS AND PHNS WERE ALSO CONSIDERED. AN EXAMPLE OF LOW SOCIAL SUPPORT WOULD BE A MOTHER WHO COULD LIST ONE OR TWO PEOPLE WHOM SHE RATED AS SUPPORTIVE, WITH SPORADIC CONTACT. IN ADDITION, SHE WAS UNABLE TO IDENTIFY ANYONE TO HELP WITH SUCH THINGS AS TRANSPORTATION DIFFICULTIES, MONEY SHORTAGES OR CHORES IF BEDREST BECAME NECESSARY.
F. SOCIAL DISORGANIZATION WAS CHARACTERIZED BY HOUSEHOLDS WITH ONE OR MORE OF THE FOLLOWING CHARACTERISTICS: UNSTABLE HOUSING, CHAOTIC RELATIONSHIPS (MULTIPLE PARTNERS, FIGHTS, ETC.) DRUG USE IN THE HOME, RECURRENT FOSTER HOME PLACEMENT FOR CHILDREN, OR A FRAGMENTED FAMILY.
G. NO KING COUNTY DATA ARE AVAILABLE; THIS PROPORTION IS FOR WASHINGTON STATE, AS DETERMINED BY THE PREGNANCY RISK ASSESSMENT MONITORING SYSTEM (PRAMS).

NOTE: UNKNOWN VALUES WERE NOT INCLUDED IN PERCENT CALCULATIONS

PUBLIC HEALTH NURSING

All of the 27 cases reviewed in this group had at least one criteria making them high priority for Public Health Nursing (PHN) home visits, but a PHN was involved with only 42 percent of them. Therefore, lack of appropriate referrals to PHNs by other agencies and providers was identified as an issue. In other cases in which a PHN was involved, issues with nursing services were identified. In five of the 27 cases, these problems were considered to have contributed to the infant's death and in nine cases, the problems had the potential to adversely affect the infant's health.

REFERRAL PROBLEMS (6 cases)

In some cases, providers and agencies did not refer clients to PHNs, who could have helped them obtain services. In other cases, the referral did not contain sufficient information to enable the PHN to locate the client.

Several high risk mothers did not receive a referral for Public Health Nursing services.

ILLUSTRATIVE VIGNETTE: Sharon, a teenage, single mother was living with an unsupportive extended family in a low income area. During her pregnancy, she was injured and made a hospital emergency room visit. At the hospital, a referral was made to CPS. However, no referral was made for PHN services. Sharon later went into labor prematurely and delivered an infant who died within minutes. She was discharged home, without receiving a PHN referral or follow-up. A PHN could have monitored the mother's health, provided her with educational materials, and assisted her with obtaining referrals for help with domestic violence and grief following the death.

PROBLEMS WITH PHN SERVICES (*6 cases*)

In other cases, issues concerning the services provided by PHNs emerged. These issues included insufficient tracking of cases by the PHN and inadequate communication with CPS by the PHN.

Timeliness of service and lack of persistent follow-up by the PHNs were an issue in several cases.

ILLUSTRATIVE VIGNETTE: The Sherman family moved from out-of-state after being "on the road" for several months during Leslie's pregnancy. Her first local prenatal visit was delayed, with reported sporadic visits out-of-state. At her first prenatal visit, she was placed on Maternity Case Management. However, she received no subsequent PHN follow-up despite a failed prenatal appointment and a hospitalization for medical complications. Her baby also received no PHN services despite delayed illness care and treatment. The infant died of a condition which, if detected sooner, may have been treatable. Teaching parents the signs and symptoms of illness in infants and linking families to appropriate sources of health care are important functions of public health nursing. In this case, inadequate PHN services and case management were considered to have contributed to the infant's death.

Issues concerning poor coordination of services and lack of communication were identified in several cases.

ILLUSTRATIVE VIGNETTE: Jennifer lived with an abusive partner and received erratic care during her pregnancy. A toxicology screen was positive for cocaine at birth. A contract was drawn up by CPS which included follow-up for drug evaluation and treatment, and PHN visits. Mother and baby were discharged home together. Two visits were made by the PHN without establishing contact because Jennifer was never home. She was then considered lost to follow-up. No notification was made to CPS. The infant died an accidental death related to sleeping in an unsafe location. Careful tracking and regular communication by both agencies may have enabled PHNs to provide Jean with the help she needed to care for her infant, including assuring her infants attendance at medical appointments and maintaining a safe environment while the infant was sleeping.

RECOMMENDATIONS

1. Identify high risk women before and during pregnancy, including women with no other children, for referral to support services prior to delivery of the infant.
2. Meet with providers and agencies to promote better understanding of public health nursing and how to make referrals.
3. Improve the referral process with options such as electronic transfer of referral, single phone number for all referrals, and/or secure fax machines.
4. Encourage providers to make a PHN referral for women and infants when:
    - A referral to CPS is made or when CPS is involved
    - For women with mental health, substance abuse, or homelessness problems
    - For pregnant women being released from incarceration
    - For those who have had no prenatal care
5. Increase capacity within the Health Department to consistently respond to referrals in a timely manner and to provide service for sufficient periods of time to monitor each infant's well-being.
6. Create a mechanism for internal Health Department review of infant deaths where coordination of care problems have been identified to promote region-specific problem solving.

OTHER PUBLIC HEALTH AND COMMUNITY SERVICES

A broad range of community health care and support services for pregnant and parenting women and infants are offered through a complex, interrelated system of public and private agencies and hospitals throughout Seattle and King County. Examples of services available throughout the county are:

- Family planning
- Prenatal care[a]
- WIC (nutrition screening and food supplements for income-eligible pregnant women and young children)
- Well child care (including immunizations, screening, and preventive services)
- Medical care for the diagnosis and treatment of illness

[a] This report includes only a sub-set of all cases in which inadequate prenatal care was identified. A subsequent report will review all cases in which the mother received inadequate prenatal care. Factors contributing to inadequate prenatal care will be reviewed and recommendations on improving use of prenatal care will be presented.

There are a variety of entry points into this system of services. Providers in settings such as family planning, WIC, emergency departments, mental health sites, clinics, physicians' offices, and a variety of other sites for delivery of health and social services have the opportunity to provide needed referrals for services. When a woman accesses any part of this system at any point during the continuum of pregnancy and parenting, an opportunity exists to connect her with other services that meet her needs. Of key importance is knowledge and awareness on the part of staff at all agencies of what services are available to women and families and how to connect them to these crucial aspects of the system. Interagency communication is another key to successful service delivery.

The client may only seek care from one provider or agency. If referrals for other services such as prenatal care are not made at that first agency contact, an opportunity has been missed to provide women and families with the broad scope of services available. In some cases, the women lost all contact with potentially helpful services.

For a portion of these cases, the client knew of the availability of services but did not use them. These included prenatal care, WIC during pregnancy, and well child care (including immunizations following birth). There appeared to be indifference or even resistance to using the services among some of the highest risk women. While some of these women seemed to be uninterested in receiving services, others may have gone without them because of fears, mistrust, or competing needs. Therefore, this group presents a unique challenge for the community to offer services that will reach this hard-to-reach sub-population of women.

ISSUES CITED WITH OTHER PUBLIC HEALTH AND COMMUNITY SERVICES

WIC services were not obtained by several income-eligible women. Accessing WIC services could have also linked clients with other services. (5 cases)

ILLUSTRATIVE VIGNETTE: Sandy, a low income, single mother with other children living at home was eligible for food supplements and WIC services. With a history of inpatient substance abuse treatment, she had positive drug screens during her pregnancy and intermittent homelessness. She used food banks, but no referral for WIC services was made during the pregnancy. WIC services not only provide vouchers for food for pregnant and parenting mothers and their infants, but also offer the support of nutritionists and nurses, who frequently refer their clients to PHNs.

There was poor utilization of community health care and social services by families despite familiarity with these services. (4 cases)

ILLUSTRATIVE VIGNETTE: Linda, a young mother with a history of substance and alcohol abuse and homelessness, received little prenatal care. The prenatal team tried to assist her with her problems, but she failed to keep appointments and did not follow through with recommendations. She rejected shelter and low income housing, and was described as "very picky." Even Linda's family stopped assisting her because they felt overused. The potential for intervention is cases such as this seems limited.

Referrals from one community agency to another for needed services during pregnancy were lacking in several cases. (2 cases)

ILLUSTRATIVE VIGNETTE: Heidi had a history of substance abuse, incarceration and CPS involvement with her other children. She made only a single prenatal visit. At that visit a toxicology screen was positive and she acted inappropriately with her children during the visit. A nurse recommended that CPS be involved, but no one actually made the referral. At birth the infant was noted to be jittery (a sign of drug exposure), but Heidi denied drug or CPS involvement. The hospital social worker did not verify the information, no hospital providers referred to CPS, and the baby was discharged home with the mother. Referral to CPS may have resulted in a drug and alcohol evaluation, assessment of the safety of the infant and perhaps removal of the infant to a safer environment.

Coordination/communication between community and health services agencies was inadequate in several cases. (2 cases)

ILLUSTRATIVE VIGNETTE: Carol spoke with a social worker sometime during her pregnancy. When questioned about her lack of prenatal care she replied that she was too tired and didn't like doctors. No referral was made by the social worker nor did the mother access any prenatal care. At delivery, she was described as listless, depressed and evasive. A social worker made a PHN referral and requested pediatric follow-up, but no PHN, sick or well child services were documented anywhere. Lack of prenatal care and routine health services for infants increases the risk of infant death. If the referral to a PHN had been completed, this infant might have received better health services.

Prenatal care was inadequate or totally lacking in several cases. (19 cases)

ILLUSTRATIVE VIGNETTE: Sophie, an older single mother, described her recent life as being on the run, lonely and homeless with heavy use of alcohol and illegal drugs. Seen once for a pregnancy diagnosis but had no prenatal care. She was diagnosed with a disease, but never returned for treatment. Her pre-term infant died of a congenital infection. Sophie was very depressed. Routine prenatal care could have detected this infection and might have prevented the preterm delivery and infection.

RECOMMENDATIONS

1. Every pregnant woman should receive early and continuous prenatal care.
2. Ensure that all community health and social service providers are familiar with the range of support services available for pregnant and parenting women, are prepared to make appropriate referrals, and assist the client by motivating and facilitating their use of these services.
3. Develop innovative methods for motivating high risk women to seek available services for pregnancy and infant care and for making those services more accessible and acceptable to high risk families. Examples of incentives could include gifts, money, gift certificates, assistance with childcare, transportation, and convenient evening hours for services.
4. Improve inter-agency communication. Provide coordination of care for pregnant and parenting women who need multiple service providers by linking these women with a case manager and community outreach services. These services should assist with setting service priorities and tracking client response to various referrals and services.
5. Increase awareness among women of childbearing age and providers who serve them concerning availability of food and nutrition programs for pregnant women and infants.
6. Address legal barriers which inhibit exchange of information between prenatal care providers on the one hand and drug and alcohol treatment and mental health providers serving pregnant women on the other. (Note: Access to records is currently made possible only by obtaining a mother's signature on a nine part release form.)

CHILD PROTECTIVE SERVICES (CPS)

Slightly more than half (52 percent) of the 27 cases with inadequate support services were known to CPS. Issues related to CPS were considered to have contributed to the infant death in five cases and had the potential to result in adverse outcomes in nine additional cases. Dealing with high risk cases such as these presents many challenges to this agency designated to deal with the assessment and management of suspected and actual child abuse and neglect. While this Review cannot conclude that the concerns raised about CPS services caused the deaths of these infants, addressing these concerns has great potential to improve the well-being of infants in King County.

PROBLEMS WITH REFERRALS AND LEVEL OF SERVICE

Barriers to early referral and appropriate level of service were identified in several cases.

ILLUSTRATIVE VIGNETTE: Angela, a mother who had received inpatient substance abuse treatment, had a history of alcohol, illicit drug and mental health problems. CPS had been contacted during her pregnancy. However, according to agency policy, since the contact was made during her second trimester, it was considered an "information only" referral and no investigation was done. Angela and her baby were discharged the day after delivery. She had no place to live, and despite her plans to move to a shelter, did not. The baby's crying and needs became increasingly difficult for her to cope with. CPS was again contacted, this time by a hospital Emergency Room. The baby was removed from Angela's custody and placed elsewhere. The delay in CPS action may have resulted in less than adequate care of the infant by her caretakers.

Lack of capacity to follow-through and monitor CPS contracts was identified for mothers/babies with positive toxicology screens at birth. (5 cases)

ILLUSTRATIVE VIGNETTE*:* Maggie, a single mother of several children, had no prenatal care with any of her pregnancies. Her partner was unsupportive and was incarcerated during pregnancy. At delivery, the infant had a positive toxicology screen. An evaluation was done by CPS and the baby was released to Maggie under the supervision of a relative. A PHN visited and found Maggie highly stressed with little help. CPS received "conflicting" reports that she was abusing drugs and alcohol again and was not properly caring for her children. CPS staff assessed the situation by phone, but made no home visit. The baby subsequently died, in part due to ongoing substance abuse and neglect by his mother. Lack of a home assessment and of coordination between CPS and PHN staff were considered to have contributed to the infant's death. Following the death, a multidisciplinary case conference was held to assess the mother's ability to care for her other living children.

The system for monitoring cases in custody was ineffective in several cases. (6 cases)

ILLUSTRATIVE VIGNETTE: In several cases, high risk infants were placed in the custody of a relative. For example, an infant's mother was a chronic IV drug user. Toxicology screen was positive at birth. Following birth, the baby was observed for withdrawal and discharged home. By court order, custody was given to a relative. The baby was staying with his mother when he died from an accident caused by inadequate attention to safety precautions. Closer monitoring by CPS and PHNs would have revealed that the baby continued to live with his mother in violation of the CPS contract and may have resulted in more effective drug treatment for the mother.

PROBLEMS WITH LEVEL OF INTERVENTION

Infants were retained in the family despite evidence of inability to care for the baby. (6 cases)

ILLUSTRATIVE VIGNETTE: Luanne had a history of alcoholism, homelessness and depression and was known to CPS. She moved frequently and was hard to track. Her latest pregnancy was unwanted. She failed to show up for appointments with her physician. CPS unsuccessfully continued to work with her on housing and alcohol treatment. CPS was notified of the birth of her child. Luanne continued to abuse alcohol. She wanted to attend an alcohol treatment facility where she could keep her children. When one was finally found, she canceled appointments.

Children were returned to family prior to completion of rehabilitation. (2 cases)

ILLUSTRATIVE VIGNETTE: An infant was the first born to Carmen, a single mother with a long history of mental illness, coupled with alcohol and drug abuse. Although she denied using alcohol and other drugs during her pregnancy, a CPS worker documented otherwise. At birth, CPS put a hold on the infant but was unable to persuade the court to rule for continued custody. The baby was then released to Carmen. After trying to cope with motherhood, she threatened to harm the baby and her infant was placed elsewhere. More timely action would have removed her infant from this dangerous situation.

ADMINISTRATIVE PROBLEMS

Coordination between workers from CPS and Child Welfare System (CWS) was poor.

ILLUSTRATIVE VIGNETTE: Lucy had a long history of substance abuse. All of her other children were released from the hospital after birth with a CPS contract. The children were in long term care with CWS. After the mother gave birth again, she handed the baby over to a relative. CPS was not notified of the birth. The mother was eventually incarcerated, but she still retained custody of her infant until she died from an accident. Although CPS and CWS are sister programs within the Division of Family Services, their lack of communication and coordination put this baby at risk.

There were breakdowns of communication within CPS and between CPS and other agencies, even when agencies have contracted to work together. (4 cases)

ILLUSTRATIVE VIGNETTE: Laticia was a victim of physical and mental abuse. Her baby's toxicology test at birth was positive despite her vehement denial of drug use. CPS drew up a contract and Laticia was referred for treatment as well as to the CPS-PHN Project.[b] The nurse found the family living in very crowded conditions with relatives, and the baby was missing medical appointments. Other providers were concerned about the infant's health and welfare and notified the nurse. The PHN tried to visit several times unsuccessfully and then notified CPS, but no action was taken.[c] The infant died from an accident.

[b] This Project serves families who are at moderate to high risk for child abuse with no geographical or financial restrictions. A CPS social worker refers the clients to a public health nurse who provides in-home assessment, teaching, and referrals as indicated for health related parenting and safety concerns. There is active coordination between the CPS worker and PHN for ongoing case management and coordination with community agencies. The goals are to provide a comprehensive collaborative service to families with greater continuity of care and to prevent further child abuse through education, support, and resources.

[c] Since this case was reviewed, monthly meetings have been established between PHNs on the CPS project and the CPS intake supervisor to improve communications.

Appropriate action by case workers were sometimes lacking. (2 cases)

ILLUSTRATIVE VIGNETTE: Maria had a history of substance abuse which included incarceration. She was being followed by CPS for her other children and felt overwhelmed with the pregnancy. She had no prenatal care. A toxicology test was positive at delivery. CPS was notified and a contract to refrain from substance abuse and obtain treatment was written. The PHN from the CPS-Public Health Nurse Project noted extreme difficulty working with the family. She documented many visits over several months and found someone at home only twice. She communicated her concerns to CPS. A joint CPS/PHN visit was made a few days prior to the death of Maria's baby. At the visit, it became apparent that the mother had not complied with the provisions of her contract. The infant died accidentally because of inadequate safety measures while the mother was intoxicated.

RECOMMENDATIONS

1. Increase capacity within Child Protective Services to consistently respond to referrals in a timely manner and to keep families open to service for sufficient periods of time. This will allow workers to adequately monitor infant well-being so that intervention may be made when necessary.
2. Assign a high priority to referrals made by mandated reporters and establish strong communication links with those providers through both regular and case-specific interaction.
3. Educate providers about the mechanism for review and mediation of cases when agencies and providers involved do not agree with the disposition of the case by CPS. (Progress Note: In place now is an appeals system consisting first of the child protective team, then up the chain of supervision in the agency. A 1-800 notification telephone number is also available.)
4. Continue to improve tracking of families within CPS to clarify which worker is accountable and facilitate monitoring of cases by CPS supervisors.
5. Increase accountability within the agency by implementing review by supervisors of individual worker's decisions, family progress and outcomes. (Progress Note: A manual is in development which includes legal citations and grids on shared decision making by workers or supervisors. Also, there is now a quality assurance unit for the division)
6. Improve tracking of families across the various programs and sites within DSHS (Foster Care, Family Reconciliation Services) so CPS can be informed when a family known to the agency has had another child or is experiencing family distress.
7. Improve community-wide tracking and communication so that families with children at risk are followed across agencies. Develop electronic tracking capabilities.
8. Focus on primary prevention of child injury by broadening the conditions under which children receive CPS services and interventions.
9. Expand the Alternate Response System to all of King County. This program serves families at low risk for child abuse who are referred to CPS. PHN services, transportation, childcare, parenting education, counseling and emergency assistance are available.
10. Review the agency policy of using voluntary service plans with substance abusing parents. (Voluntary Service Plan: A written plan drafted by CPS worker and signed by parent; dependent on voluntarily cooperation.)
11. Implement review of all deaths among infants in CPS and CWS care to identify problems and take subsequent remedial action. (Note: State law SHB 1035 requires that a consistent process be developed for child death reviews.)
12. CPS should evaluate cases for substance abuse and consult with substance abuse professionals when designing a case management plan.
13. In cases where decisions concerning custody of children are being made, limit dependency status (custody of children by DSHS) to the date of the 6 month court hearing. If parents have not met the conditions of the order by that time they will be held accountable.

14. Create a dialogue among the Bar Association, health care providers, CPS, and other agencies to promote understanding of CPS services and operations.

JAIL HEALTH SERVICES

Pregnant and parenting women who are jailed are often at very high risk from the consequences of prostitution, substance abuse or other illegal and risky activities. During incarceration they are also involuntarily separated from their families and health care providers. This population presents both unique challenges and opportunities for jail health providers and the community health care system, since a jail stay may be the conduit into care. At a minimum, continuation of care needs to be provided during the stay. Jail health professionals often have only brief contact with these women because of the short duration of stay of many inmates. During this time, they not only have the responsibility for screening for health problems, but also for treatment and referral for additional care.

Adding to this challenge are the problems that result when some pregnant women conceal their pregnancies or do not know that they are pregnant. Continuity of care and ensuring appropriate follow-up after discharge are important links for the health and social well-being of incarcerated mothers and their infants.

EXAMPLES OF PROBLEMS CITED IN CASES (*4 cases)*

Many jail clients are in for short stays (less than 24 hours), making provision of prenatal services or referral into on-going care difficult.

ILLUSTRATIVE VIGNETTE: Cassandra had a long history of cocaine use and had been jailed several times over the past few years. She had one prenatal visit with a positive toxicology screen. The PHN referred Cassandra to CPS after she missed appointments. Cassandra was admitted to the jail in her second trimester of pregnancy and was seen by a nurse on admission. Cassandra was briefly screened and referred to the obstetrical team, but was never seen by them as she went to court early in the morning and was released.

Some clients may try to conceal their pregnancy or labor.

ILLUSTRATIVE VIGNETTE: A pregnant mother did not notify jail health service personnel of her impending labor, resulting in a rushed trip to the hospital. A precipitous delivery has the potential for harming both mother and infant.

RECOMMENDATIONS

1. Provide the patient with a "passport" which contains a brief history of obstetrical data, provider's name and other relevant medical information.

2. Increase collaboration between Jail Health Services, other Health Department primary care providers and Harborview Medical Center Women's Clinic in order to access obstetrical records on shared patients.

3. Expand outreach programs for clients of Jail Health Services so that outreach workers can expand their services to include alcohol and drug treatment programs (such as MOMS) and establish liaisons with the courts and PHNs. Currently, Jail Health Services works with outreach workers from Yesler Terrace Clinic to care for prenatal patients.

4. Clarify the relationship of Jail Health Services with Child Protective and Child Welfare Services to prevent communication breakdowns. Specify what types of referrals to CPS/CWS are appropriate and what follow-up action can be expected.

5. Establish a women's resource center in the jail. Educational materials and group classes are needed on subjects such as domestic violence, parenting and survival skills (food, shelter, legal, medical and job training).

6. Obtain a menstrual history on admission to the psychiatric unit to rule out pregnancy for all female inmates housed on the unit. An initial assessment and pregnancy test should be done if indicated and if the patient consents, and a referral should made for obstetrical care. The psychiatric unit admission form should include a brief health history.

7. Coordinate County and state agency obstetrical care, mental health and substance abuse programs for pregnant women who have a dual diagnosis of substance abuse. Jail Health Services cares for a number of patients who need mental illness, substance treatment and obstetrical care in an inpatient setting. These women are too ill to care for themselves and are adversely affected by homelessness, drug use and mental illness.

The Health Department is responsible for Jail Health Services and has included them in the new division of Community Oriented Primary Care. This reorganization will strengthen the linkages of Jail Health Services to other primary care services within the Department and facilitate implementation of these recommendations.

EMERGENCY MEDICAL SERVICES / FIRST RESPONDERS

The citizens of Seattle and King County are fortunate in having a sophisticated system of well-trained responders to contact in case of the death or serious illness of an infant. The system consists of a network of emergency medical system providers and private ambulance companies throughout the county. Police also often respond when an infant has died in the home. Families are often in a state of severe shock and grief when these services arrive. They are extremely vulnerable, often feeling guilty, frightened, and distraught. Additionally, first responders often feel a strong emotional response to the death, such as grief or anger. These feelings, if unrecognized, can influence their actions and attitudes when responding to the family. While training has been offered for first responders to infant deaths, the scope of the training continues to be a challenge because of the large number and turnover of police officers, firefighters and emergency medical services personnel in King County.

EXAMPLES OF PROBLEMS CITED IN CASES

Inappropriate behavior by first responders (police) at the scene of SIDS deaths was an issue for several families. (2 cases)

ILLUSTRATIVE VIGNETTE: Families felt they were treated like "criminals" by first responders when their babies died. They were locked out of their houses for interrogation and/or taken to the police station when their babies died unexpectedly at home.

Delays in Emergency Medical Services arrival at infant's home were infrequent but significant for the families. (2 cases)

ILLUSTRATIVE VIGNETTE: Ambulance arrival was delayed because no street signs were installed in a new housing development and in another because parents' directions on how to find the house were ignored by EMS staff.

Inconsistent actions at the scene of infants dying at home was sometimes a problem. This is difficult to address due to the large number of first responders who are supervised by multiple jurisdictions . (2 cases)

ILLUSTRATIVE VIGNETTE: While most infants dying at home from SIDS were not transported, several cases were removed to area hospitals before arrival of the Medical Examiner's staff. This unnecessarily disrupted the Medical Examiner's scene investigations of those cases and hindered the determination of an accurate cause of death.

RECOMMENDATIONS

1. Require developers to put up street signs as soon as roads are in. Signs must be maintained.
2. Develop interagency cooperation to assist the Medical Examiner's Office with gathering information for the scene investigation. This includes coordination of first responder activities with the Medical Examiner on cases in which the cause of death is unknown or appears to be SIDS. In these cases, paramedics and police are called to the scene long before the Medical Examiner's Office is able to conduct the standard scene investigation, which is an essential element in determining the infant's cause of death.
3. Provide ongoing training to paramedics responding to infant deaths to complete appropriate sections of the standardized infant scene investigation protocol for the Medical Examiner's Office.
4. Ensure ongoing training for all first responders(police, firemen, and paramedics) to promote sensitivity regarding issues of personal and family grief related to infant's death.

SUBSTANCE ABUSE

The pregnant or parenting substance abusing women described in these cases were usually living stressful lives, sometimes with chaotic living conditions and limited coping skills. Such circumstances placed these women and their children at risk of poor health outcomes. Professionals were often frustrated in keeping them in prenatal care and linking them to community resources because of the high priority they placed on their addictions.

Drug and alcohol screening of pregnant women is not routine in King County. Furthermore, the concept of screening for substance abuse is not well understood by many providers and policy makers who believe using toxicology screens to detect drug use is sufficient. Research has shown that evaluation which includes physical assessment for signs and symptoms of substance abuse and a careful history for social and clinical indicators of abuse are more effective than relying solely on drug testing.

The following problems and recommendations are limited to the issues of substance abuse as related to the 27 cases reviewed in the report discussed in this chapter. More general recommendations for substance abuse issues will be made in a subsequent report which will examine all cases of infant deaths where there was evidence of maternal substance abuse.

EXAMPLES OF PROBLEMS CITED IN CASES

Drug and alcohol screening of pregnant women/newborns is inconsistent. Ongoing tracking of substance abuse is difficult for providers. (7 cases)

ILLUSTRATIVE VIGNETTE: Some mothers with positive toxicology screens during prenatal care were not given toxicology screening at the time of delivery. In these cases, the babies were not tested either. They were discharged in the care of their mothers, with no follow-up plan for assessment and treatment. In some cases, impairment due to substance abuse limited the abilities of the mothers to safely care for their infants. An example would be an infant who was placed in an unsafe location to sleep and died an accidental death.

Resources such as inpatient programs for parenting women are lacking to meet the needs of substance abusing women.

ILLUSTRATIVE VIGNETTE**:** Anita drank daily during her pregnancy, was homeless, and delivered an infant with possible fetal alcohol syndrome. CPS was notified of the birth and the baby was discharged in Anita's custody to stay with relatives. Her caseworker and social worker made appointments for alcohol treatment, but she canceled them because she could not take her children with her.

CPS contracts for substance abusing women are not well monitored and sometimes ineffective. (6 cases)

ILLUSTRATIVE VIGNETTE: Raylinn, a single mother with several living children, had a prior history of intravenous drug and alcohol abuse. She was followed by several health providers during her pregnancy. Her chaotic housing situation, with stays in hotels, cars, and shelters, led her providers to call CPS. She relinquished the children during this pregnancy, was referred for alcohol treatment, and was given help with housing. When she gave birth, the toxicology report was negative and her infant was discharged to her care at seven days. They moved into housing approved by CPS. A PHN notified CPS of her concerns regarding household crowding and poor parent-infant interaction after a home visit six weeks after birth. Meanwhile, both Raylinn and her baby missed their clinic appointments. CPS was notified again, but the baby remained in the home until death.

RECOMMENDATIONS

1. Routine screening by providers should include recognition and documentation of signs and symptoms of substance abuse, a careful history for substance abuse, and monitoring of indicators of substance abuse.

2. Standardize protocols for providers on recognition and documentation of substance abuse, including client assessment and toxicology screening for mothers and babies.

3. Perform risk assessment on all families where substance abuse is found and refer to CPS as mandated and to public health nursing as appropriate.

4. Develop procedures and protocols for CPS contracts for substance abusing women that ensure that they are individualized, enforceable, carefully monitored and evaluated.

5. Provide ongoing training for professionals in detection and management of substance abusing clients.

6. Expand primary prevention efforts, such as health education, regarding substance abuse.

7. Provide additional resources for detection, treatment, and rehabilitation of substance abusing mothers.

8. Address legal barriers which inhibit the exchange among prenatal care providers of crucial information concerning patient alcohol and other drug problems

CONCLUSIONS

Ideally, all women with medical and/or psychosocial risks would have early, consistent prenatal care. This care would include outreach, maternity screening and arrangements for appropriate and available medical care. It would also utilize interdisciplinary support services, including nursing, nutrition, social work, CPS and on-going coordinated case management. Referral to other community resources and health education such as childbirth classes would also be available. Tracking of pregnant and parenting women would assure follow-up on failed appointments and coordination between service providers. Comprehensive and standardized screening and treatment for substance abuse would be the norm. Infants at risk of abuse or neglect would be promptly identified, assessed and assured a safe and nurturing home. All providers, including emergency first responders, would offer sensitive and compassionate care to the families of infants who have died.

While many of these services are available in the community, review of these cases indicated that not all women are referred into the system and that services are not always appropriately delivered. Additionally, some referrals are not made early enough in pregnancy to yield maximum benefits. The system does not always respond in an adequate or timely way. Women who are hard to serve are inconsistently tracked, and communication between service providers can be inadequate.

Implementation of the recommendations contained in this chapter would help move us towards the goal of comprehensive and coordinated services for pregnant women and families.